

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/701,510	02/02/2001	Martin Bergenwall	PM-275395	5373
7590 05/06/2004			EXAM	INER`
PILLSBURY WINTHROP LLP 1600 TYSONS BOULEVARD			LEVITAN,	DMITRY
MCLEAN, VA			ART UNIT	PAPER NUMBER
·			2662	1/
			DATE MAILED: 05/06/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
0.65 - 4.45 - 0.00	09/701,510	BERGENWALL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Dmitry Levitan	2662				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) <u>1-26</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) <u>8,9,19 and 20</u> is/are allowed. 6) ☐ Claim(s) <u>1,4,10,12,14-16,21,23 and 24</u> is/are re 7) ☐ Claim(s) <u>2,3,5-7,11,13,17,18,22,25 and 26</u> is/a 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration. ejected. ire objected to.					
_	_					
	I0)⊠ The drawing(s) filed on <u>02 February 2001</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	* ' '	· •				
11)☐ The oath or declaration is objected to by the Ex	• • • • • • • • • • • • • • • • • • • •					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 2662

Preliminary amendments, filed 11/30/00 and 01/08/01, have been entered. Claims 1-26 remain pending.

Drawings

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 220, 21-23, 210, 119. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 3. The drawings are objected to because of typographical error on Fig. 14, PCS instead of FCS. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Art Unit: 2662

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 4, 10, 12, 14, 15, 16, 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa (US 4,720,829) in view of Reed (US 4,939,731).

Regarding claims 1, 10, 12, 21 and 23, Fukasawa substantially teaches limitations of claims 1, 10 and 21:

A data transmission method and station in a telecommunication system (Fig. 1 and 3:40-50), comprising

Transmitting data in frames of a link protocol provided with a retransmission mechanism from transmitting end to a receiving end (3:31-39), characterized by

Transmitting data in information fields of the protocol frames (transmission procedure 3:58-64),

Changing the length of the protocol frame during the connection (changing the frame length from L1 to L2 4:43-47),

Inserting the payload units to be retransmitted, which were transmitted for the first time before the frame length was changed, into one or several protocol frames with a new frame length (retransmission using L2 frames 4:47-52).

Art Unit: 2662

Fukasawa does not teach transmitting data in fixed length data blocks, which have been numbered and use the numbering in retransmission.

Reed teaches transmitting data in fixed length data blocks (R-blocks on Fig. 4 and 4:33-41), which have been numbered (4:33) and use the numbering in retransmission (each R-block is acknowledged and only those in error are retransmitted 4:47-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add transmitting data in fixed length data blocks, which have been numbered and use the numbering in retransmission of Reed to the system of Fukasawa to improve the system retransmission protocol.

In addition, regarding claim 21, Fukasawa teaches a mobile station (transmission side on Fig. 1 of the automobile 1:6-10).

Regarding claims 15 and 16, Fukasawa teaches obtaining the frame length directly from in-band signaling during the connection (ACK and NAK signals 4:26-38).

7. Regarding claims 4, 14 and 24, Fukasawa and Reed substantially teach limitations of claims 4, 14 and 24.

Fukasawa and Reed do not teach use of RLP, LAC, RLCP or MAC protocols for the link protocol with retransmission.

Official notice is taken that use of RLP, LAC, RLCP or MAC protocols for the link protocol with retransmission is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use RLP, LAC, RLCP or MAC protocols as the link protocol with retransmission in the

Art Unit: 2662

Fukasawa

system of Fukasawa and Reed as a design choice to utilize well- known existing protocols in the system.

Allowable Subject Matter

8. Claims 8, 9, 19 and 20 allowed.

LIS004720829

9. Claims 2, 3, 5-7, 11, 13, 17, 18, 22, 25 and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Error control encoding system

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

rukasawa	03004720629	Error control encoding system.
Reed	US004939731	Data transmission system with automatic repeat request.
Dail	US005953344A	Method and apparatus enabling enhanced throughput
efficiency.		
Tsukamoto	US006625166B2	Communication system for time-division multiplexed data.
Grivna	US005949799A	Minimum latency data mover with auto-segmentation and
reassembly.		
Blasbalg	US004771391	Adaptive packet length traffic control in a LAN.

Art Unit: 2662

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is 703-305-4384. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dmitry Levitan
Patent Examiner. 04/26/04.

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600